

## TWO UNUSUAL CASES\*

BY

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### (1) METRONIDAZOLE OVERDOSAGE

**Case 1, a pregnant unmarried girl aged 16,** referred by her own doctor for routine tests, was found to have both gonorrhoea and *T. vaginalis* infestation, for which she was given streptomycin 1 g., penicillin (P.A.M.) 600,000 units intramuscularly, and metronidazole 200 mg. orally three times a day for 7 days. The next day, she was seen to swallow all the tablets at once, and 4 hours later, slightly disorientated, was taken to the family practitioner, who sent her to hospital.

As her general condition remained excellent, no treatment was given, and unfortunately no quantitative estimation of the drug concentration in blood or urine was performed.

However, 6 days later a blood count showed Hb 76 per cent., and white blood cells 10,500 (polymorphs 69 per cent., leucocytes 30 per cent., monocytes 1 per cent.); one month later no significant change was noted except that the Hb had risen to 83 per cent. after iron therapy.

When she was examined 6 days after the above contretemps, tests for both *N. gonorrhoeae* and *T. vaginalis* were completely negative and they remained so at weekly intervals for 6 weeks when the patient went to a maternity home. She has since been delivered of a healthy infant.

### (2) URETHRITIS DUE TO *N. catarrhalis*

**Case 2, a man aged 24, who had been married 18 months,** was referred as a case of untreated gonorrhoea of 13 days' duration with written laboratory confirmation. He strenuously denied extra-marital exposure and stated that, apart from close external contact, physical maladjustment had so far prevented full consummation of the marriage. Examination revealed a profuse greenish discharge with meatitis which he stated was tending to lessen, while a Gram-stained smear showed an unusual number of both extra- and intra-cellular Gram-negative diplococci. An intramuscular injection of P.A.M. 450,000 units (Avloprocil) effected a clinical cure within 2 days and all was well 2 weeks later.

The patient continued to assert that, if he had indeed contracted gonorrhoea, it could only have been from his wife, in which case his marriage was "done for"; culture, however, produced a growth of non-sugar-fermenting *N. catarrhalis*, a result which was confirmed, on inquiry, by the former laboratory. So elated was the patient that he defaulted after 2 weeks without any further tests, except that two post-treatment sets of nose, throat, and conjunctival smears and cultures failed to produce *Neisseria* of any kind.

The wife, whose introitus (rather surprisingly) admitted with ease the largest Cusco speculum, appeared clinically normal, and four successive smears and cultures from urethra, cervix, nose, and throat were negative for all types of *Neisseria*. In both husband and wife the Wassermann reaction and gonococcal complement-fixation test were negative; the woman was not treated.

### Discussion

Harkness (1950) stated that "urethral infections due to Gram-negative diplococci other than gonococci commonly have signs and symptoms identical with those of gonococcal urethritis". This seems especially true of meningococcal urethritis, the first claimed description of which was presented by Carpenter and Charles (1942) in a series of seven cases. Although experienced in infectious diseases, I have never encountered urethritis in meningococcal infections, but epididymo-orchitis occurred on occasion and was presumably blood-borne. This complication varies "in different epidemics from 2.6 to 6.7 per cent." (Rolleston and Ronaldson, 1940). Of course it is fruitless to look for rare conditions, since they occur only when unexpected. Most of these cases (of urethritis) seem to arise in or from patients who are carriers.

Wax (1949, 1950), in a large series, identified in detail the various types of *Neisseria* isolated from the human genital tract and concluded that most male patients "were usually asymptomatic,

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although occasionally a watery or mucoid (rarely a purulent) urethral discharge was present".

Ayres (1912), reporting five cases of urethritis due to *N. catarrhalis*, found that the discharge was mucopurulent during the first week and subsequently became purulent. In passing, it is interesting to note that he found that the "new"—perhaps "fashionable" should have been the term—treatment of gonorrhoea with "silver salts" (e.g. 10 per cent. argyrol) aggravated these cases and that a 1 in 32,000 solution of silver nitrate was the most satisfactory treatment. He concluded "It is impossible to make an absolutely positive diagnosis of gonorrhoea by microscope", and again, "I felt sure I was treating many cases of non-specific urethritis but knew of no simple means of distinguishing one from the other".

In short, as Wilkinson (1952) states in a comprehensive paper, . . . "a positive culture offers the only incontrovertible proof of diagnosis", a reflection which should be an incentive to a general improvement of laboratory standards in this regard in many parts of the country. Wilkinson found that, from a series of 290 female and 68 male patients attending the Whitechapel clinic who harboured *Neisseria*, the organisms were non-gonococcal in ten (3·4 per cent.) of the women and one (1·5 per cent.) of the men . . . "the latter a case due to *N. sicca* . . . In two cases . . . *N. catarrhalis* was the predominant organism in the culture . . . and appeared to be a harmless commensal".

The case reported above shows how a normally harmless commensal may occasionally, though rarely, cause trouble; it is the first instance personally encountered in which the discharge purported to be due to gonorrhoea. While the occasional missed case may not be significant in the unmarried, such an error in a married patient could have serious results; in this particular instance, even if there had been no resultant divorce, it might well have ruined an apparently happy marriage.

### Summary

A pregnant girl aged sixteen swallowed 21 200-mg. tablets of metronidazole (Flagyl) all at once. Apart from transient disorientation, no ill-effects resulted in either mother or foetus.

A married man aged 24 presented with an apparently classical attack of gonorrhoea, which investigation showed to be due to *N. catarrhalis*. The wife was found to be free from gonorrhoea and no *Neisseria* were isolated from her.

Some major contributions to the subject of urethritis due to *Neisseria* other than the gonococcus are shortly reviewed and the importance of accurate culture in the diagnosis of gonorrhoea is stressed, especially in the married patient.

### REFERENCES

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### Deux cas insolites

#### RÉSUMÉ

(1) Une jeune fille enceinte âgée de 16 ans avala 21 comprimés de Flagyl tous à la fois. Sauf une désorientation de courte durée, ni la mère ni l'enfant n'ont souffert aucun mal.

(2) Un homme marié âgé de 24 ans subit une attaque qui avait bien l'air de la blennorragie classique, mais qui était due en effet au *N. catarrhalis*. Sa femme n'avait aucun symptôme de blennorragie et l'on n'a pas pu isoler de *Neisseria* de son sérum. L'auteur passe en revue certaines oeuvres importantes au sujet de l'urétrite non-gonococcique, et rappelle l'importance des cultures diagnostiques précises, surtout chez les sujets mariés.